Appl. No. 09/649,958 Amendment dated June 30, 2005 Reply to Office Action of January 4, 2005

## **Amendments to the Claims:**

This listing of claims will replace all prior versions and listing of claims in the application.

## **Listing of Claims:**

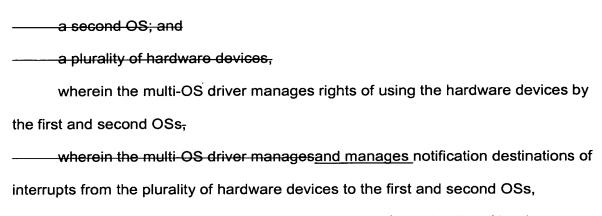
- 1-8. (Canceled)
- 9. (Currently Amended) A computer system comprising:
- a plurality of hardware devices;
- a first operating system (OS) assigned with a first hardware resource of said hardware devices;

a second OS assigned with a second hardware resource of said hardware devices exclusively when said first OS is set up, wherein said first and second OSs are executed independently of each other by a single processor;

a multi-OS driver activated as a device driver of the first OSstored in a common area of a virtual memory used by said first and second OSs, said multi-OS driver accepting interrupts from said single processor, wherein said multi-OS driver executes independently of operation of said first and second OSs, the multi-OS driver indicating an execution of an interrupt to one of said first and second OSs based on interrupts accepted; and

one of said first and second OSs runs independently of the other of said first and second OSs without hardware and software for a privilege instruction to be executed by each of said first and second OSs;

Appl. No. 09/649,958 Amendment dated June 30, 2005 Reply to Office Action of January 4, 2005



when the first OS uses a first hardware device of the plurality of hardware devices, the first OS notifies the multi-OS driver of a request for use of the first hardware device,

wherein the multi-OS driver notifies the first OS of permission for using the first hardware device, if a notification destination of interrupts to an OS received from the first hardware device is not registered as "the second OS", and wherein the multi-OS driver notifies the first OS of an interrupt from the first hardware device, when receiving the interrupt from the first hardware device after the notification of permission.

10. (Previously Presented) The computer system according to claim 9, wherein, when the first OS terminates use of the first hardware device, the first OS notifies the multi-OS driver of termination of using the first hardware device, and the multi-OS driver deletes information, namely "the first OS", from a registered notification destination of interrupts to be received from the first hardware device.

- 11. (Previously Presented) The computer system according to claim 10, wherein the multi-OS driver has a management table for managing the notification destinations of interrupts from the plurality of hardware devices.
- 12. (Previously Presented) The computer system according to claim 11, further comprising a memory, and

wherein the multi-OS driver is stored in the memory in an area accessed by the first and second OSs.

- 13. (Previously Presented) The computer system according to claim 12, wherein the multi-OS driver is mapped in the memory in such a manner that the multi-OS driver is located in a same address area in both memory space of the first OS and memory space of the second OS.
- 14. (Previously Presented) The computer system according to claim 13, wherein, when the first OS loads the multi-OS driver in the memory, the first OS maps the multi-OS driver at an arbitrary address area in the memory space of the first OS, and thereafter, alters mapping in such a manner that the multi-OS driver thus mapped is re-mapped in said same address area.

Appl. No. 09/649,958 Amendment dated June 30, 2005 Reply to Office Action of January 4, 2005

15. (Previously Presented) The computer system according to claim 14, wherein,

the first OS loads the second OS in an area of the memory allocated to the second OS, and activates the second OS, and

the second OS maps the loaded multi-OS driver in said same address area.

- 16. (Previously Presented) The computer system according to claim 9, wherein the multi-OS driver notifies the second OS of an occurrence of an interrupt from a second hardware device of the plurality of hardware devices, if a notification destination of interrupts to an OS to be received from the second hardware device is registered as "the second OS".
- 17. (Previously Presented) The computer system according to claim 16, wherein the multi-OS driver notifies the first OS of no permission for using the second hardware device, when receiving a request for use of the second hardware device from the first OS.

5